# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/931,577 | 08/17/2001 | Shinji Negishi | SON-2196 | 2196 |

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| EXAMINER |
|---|
| WILDER, PETER C |

| ART UNIT | PAPER NUMBER |
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| 2614 | |

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

<table>
<tr><td rowspan="2"><strong>Office Action Summary</strong></td><td>Application No.</td><td>Applicant(s)</td></tr>
<tr><td>09/931,577</td><td>NEGISHI ET AL.</td></tr>
<tr><td></td><td>Examiner</td><td>Art Unit</td><td></td></tr>
<tr><td></td><td>Peter C. Wilder</td><td>2614</td><td></td></tr>
</table>

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>22 December 2005</u>.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-77</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-77</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>17 August 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All  b)☒ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

# DETAILED ACTION

## *Specification*

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Since there is no claim 56, claims 57-78 have been renumbered to 56-77.

## *Priority*

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on August 21, 2000. It is noted, however, that applicant has not filed a certified copy of the translation to the application as required by 35 U.S.C. 119(b).

## *Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11, 14-24, 27-37, 40-50, 53-62, 65-75 are rejected under 35

U.S.C. 102(e) as being anticipated by Tracton et al. (6470378 B1).


Referring to claim 1, Tracton teaches a data transmission system having a

transmitting apparatus that transmits a scene description which describes the structures

of one or more signals to be used to construct a scene (Figure 4 teaches a server

element 100 that transmits a scene description via the Internet to the client element

102, Column 7 lines 46-52 teaches MPEG en-coding being used to transmit the

broadcast The scene description corresponds to PID, PAT, CAT, and PMT packets of

the MPEG data stream, The signals are the elementary streams being sent in the

MPEG data stream), and a receiving apparatus that constructs the scene according to

the scene description (The receiving apparatus is the client element 102 and Column 5

lines 66-67 and Column 9 lines 44-55 teaches program software on the clients device,

This software uses the receiving scene description; i.e. PAT, PID, CAT, and PMT to

reconstruct the scene), wherein: said transmitting apparatus has a scene description

processing means (Figure 4 elements 118) that transfers a scene description which

conforms to the state of a transmission line (Column 3 lines 58-62) and/or a request

issued from said receiving apparatus (Column 3 lines 40-55 and Column 7 lines 35-43).


Referring to claim 2, corresponding to claim 1, Tracton teaches a data

transmission system according to claim 1, further comprising a memory means (Figure

4 teach elements 122, 124, and 126) in which a plurality of predefined scene

descriptions is stored (Column 4 line 27-32 teach the memory is an inherent feature in

order to store predefined scene descriptions for a client), wherein: said scene

description processing means (Figure 4 element 118) selects a scene description from

among the plurality of scene descriptions stored in said memory means (Column 4 lines

60-62)


Referring to claim 3, corresponding to claim 1, Tracton teaches a data

transmission system further comprising a memory means in which a plurality of

predefined scene descriptions is stored, wherein: said scene description processing

means converts a predefined scene description read from said memory means into

another scene description (Column 7 lines 37-41).


Referring to claim 4, corresponding to claim 1, Tracton teaches a data

transmission system according to claim 1, wherein said scene description processing

means encodes a scene description and transfers the resultant scene description

(Column 7 lines 62-65 teaches encoding the original source with spatial scalability)


Referring to claim 5, corresponding to claim 1, Tracton teaches a data

transmission system according to claim 1, wherein: said transmitting apparatus includes

a signal processing means that transfers one or more signals (Figure 4 element 118), which conform to the state of a transmission line (Column 3 lines 58-62) and/or a request issued from said receiving apparatus (Column 3 lines 40-55 and Column 7 lines 35-43), as one or more signals to be used to construct a scene (The MPEG data being transmitted includes the signals i.e. the elementary streams); and said scene description processing means transfers a scene description that conforms to a transmission rate for a signal transferred from said signal processing means (Column 3 lines 40-55 and Column 7 lines 35-43 and Column 3 lines 58-62).

Referring to claim 6, corresponding to claim 1, Tracton teaches wherein: said transmitting apparatus includes a signal processing means that transfers one or more signals (Figure 4 element), which conform to the state of a transmission line and/or a request issued from said receiving apparatus (Column 3 lines 40-55 and Column 7 lines 35-43), as one or more signals to be used to construct a scene (The MPEG data being transmitted includes the signals i.e. the elementary streams); and said scene description processing means transfers a scene description that includes information necessary for said receiving apparatus to decode the signals transferred from said signal processing means (The scene description according to MPEG standard description is packets that carry PMT, PAT, CAT which tell the decoder how to decode the receiving packet).

Referring to claim 7, corresponding to claim 1, Tracton teaches a data

transmission system, wherein: said transmitting apparatus includes a signal processing

means that transfers one or more signals, which conform to the state of a transmission

line and/or a request issued from said receiving apparatus, as one or more signals to be

used to construct a scene (See rejection of claim 6); and said scene description

processing means transfers a scene description that specifies whether the signals to be

used to construct a scene are used or not (According to the MPEG standard in order to

reconstruct the scene the decoder at the receiver relies on PAT, CAT & PMT of the

MPEG packets, therefore packets which PAT, CAT, PMT is the signal to be used in to

construct the a scene).

Referring to claim 8, corresponding to claim 1, Tracton teaches a data

transmission system, wherein said scene description processing means transfers a

scene description whose complexity conforms to the state of a transmission line and/or

a request issued from said receiving apparatus (Column 7 lines 35-43 and Column 3

lines 58-62).

Referring to claim 9, corresponding to claim 8, Tracton teaches a data

transmission system, wherein said scene description processing means transfers a

scene description (Column 3 lines 42-55), with which a first part scene within a scene is

replaced with a second part scene whose complexity is different from the complexity of

the first part scene, in conformity with the state of a transmission line and/or a request

issued from said receiving apparatus (Column 7 lines 65-67 and Column 8 lines 1-2

teach adjusting the level of detail which is within the scene).


Referring to claim 10, corresponding to claim 8, Tracton teaches a data

transmission system, wherein said scene description processing means transfers a

scene description, with which a part scene within a scene is removed (Column 7 lines

65-67 teaches low-resolution data being presented which means part of the scene was

removed), in conformity with the state of a transmission line and/or a request issued

from said receiving apparatus (Column 7 lines 35-43 and Column 3 lines 58-62).


Referring to claim 11, corresponding to claim 8, a data transmission system

according to claim 8, wherein said scene description processing means modifies a

quantization step (Column 7 lines 35-53 teaches modifying the quality of the scene by

server element 100 which includes web server element 118), at which a scene

description is encoded (Column 7 lines 35-53 teaches MPEG data streams which are

encoded data streams), in conformity with the state of a transmission line and/or a

request issued from said receiving apparatus (Column 7 lines 35-43 and Column 3 lines

58-62).


Referring to claim 14, see rejection of claim 1.

Referring to claim 15, corresponding to claim 14, see rejection of claim 2.

Referring to claim 16, corresponding to claim 14, see rejection of claim 3.

Referring to claim 17, corresponding to claim 14, see rejection of claim 4.

Referring to claim 18, corresponding to claim 14, see rejection of claim 5.

Referring to claim 19, corresponding to claim 14, see rejection of claim 6.

Referring to claim 20, corresponding to claim 14, see rejection of claim 7.

Referring to claim 21, corresponding to claim 14, see rejection of claim 8.

Referring to claim 22, corresponding to claim 21, see rejection of claim 9.

Referring to claim 23, corresponding to claim 21, see rejection of claim 10.

Referring to claim 24, corresponding to claim 21, see rejection of claim 11.

Referring to claim 27, see rejection of claim 1.

Referring to claim 28, corresponding to claim 27, see rejection of claim 2.

Referring to claim 29, corresponding to claim 27, see rejection of claim 3.

Referring to claim 30, corresponding to claim 27, see rejection of claim 4.

Referring to claim 31, corresponding to claim 27, see rejection of claim 5.

Referring to claim 32, corresponding to claim 27, see rejection of claim 6.

Referring to claim 33, corresponding to claim 27, see rejection of claim 7.

Referring to claim 34, corresponding to claim 27, see rejection of claim 8.

Referring to claim 35, corresponding to claim 34, see rejection of claim 9.

Referring to claim 36, corresponding to claim 34, see rejection of claim 10.

Referring to claim 37, corresponding to claim 34, see rejection of claim 11.

Referring to claim 40, see rejection of claim 1.

Referring to claim 41, corresponding to claim 40, see rejection of claim 2.

Referring to claim 42, corresponding to claim 40, see rejection of claim 3.

Referring to claim 43, corresponding to claim 40, see rejection of claim 4.

Referring to claim 44, corresponding to claim 40, see rejection of claim 5.

Referring to claim 45, corresponding to claim 40, see rejection of claim 6.

Referring to claim 46, corresponding to claim 40, see rejection of claim 7.

Referring to claim 47, corresponding to claim 40, see rejection of claim 8.

Referring to claim 48, corresponding to claim 47, see rejection of claim 9.

Referring to claim 49, corresponding to claim 47, see rejection of claim 10.

Referring to claim 50, corresponding to claim 47, see rejection of claim 11.

Referring to claim 53, see rejection of claim 1.

Referring to claim 54, corresponding to claim 53, see rejection of claim 2.

Referring to claim 55, corresponding to claim 53, see rejection of claim 3.

Referring to claim 56, corresponding to claim 53, see rejection of claim 5.

Referring to claim 57, corresponding to claim 53, see rejection of claim 6.

Referring to claim 58, corresponding to claim 53, see rejection of claim 7.

Referring to claim 59, corresponding to claim 53, see rejection of claim 8.

Referring to claim 60, corresponding to claim 59, see rejection of claim 9.

Referring to claim 61, corresponding to claim 59, see rejection of claim 10.

Referring to claim 62, corresponding to claim 59, see rejection of claim 11.

Referring to claim 65, see rejection of claim 1.

Referring to claim 66, corresponding to claim 65, see rejection of claim 2.

Referring to claim 67, corresponding to claim 65, see rejection of claim 3.

Referring to claim 68, corresponding to claim 65, see rejection of claim 4.

Referring to claim 69, corresponding to claim 65, see rejection of claim 5.

Referring to claim 70, corresponding to claim 65, see rejection of claim 6.

Referring to claim 71, corresponding to claim 65, see rejection of claim 7.

Referring to claim 72, corresponding to claim 65, see rejection of claim 8.

Referring to claim 73, corresponding to claim 72, see rejection of claim 9.

Referring to claim 74, corresponding to claim 72, see rejection of claim 10.

Referring to claim 75, corresponding to claim 72, see rejection of claim 11.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12, 13, 25, 26, 38, 39, 51, 52, 63, 64, 76, 77 are rejected under 35 U.S.C.

103(a) as being unpatentable over Tracton et al. (6470378) in view of Suzuki (U.S.

6611262 B1).

Referring to claim 12, Tracton teaches all the limitations of claim 1 but fails to

teach a scene description is divided into a plurality of decoding units.

Suzuki teaches scene description is divided into a plurality of decoding units

(Column 10 lines 25-35 teaches the scene description is made up of many object

descriptors which represent AV units, and Column 13 lines 12-15 teaches the AV units

are decoded at the receiving end by elements 407, 408, and 409).

At the time the invention was made it would have been obvious for one skilled in the art to modify the scene processing means of Tracton by the dividing the scene description into a plurality of decoding units as taught by Suzuki for the purpose of multiplexing a image compressed by an MPEG scheme and described by VRML into the same bit stream (Column 8 lines 3-8, Suzuki)

Referring to claim 13, corresponding to claim 12, Suzuki teaches a data transmission system according to claim 12, wherein said scene description processing means adjusts a time interval between time instants at which said receiving apparatus decodes each of the plurality of decoding units into which a scene description is divided (Column 15 lines 15-18).

Referring to claim 25, corresponding to claim 14, see rejection of claim 12.

Referring to claim 26, corresponding to claim 25, see rejection of claim 13.

Referring to claim 38, corresponding to claim 27, see rejection of claim 12.

Referring to claim 39, corresponding to claim 38, see rejection of claim 13.

Referring to claim 51, corresponding to claim 40, see rejection of claim 12.

Referring to claim 52, corresponding to claim 51, see rejection of claim 13.

Referring to claim 63, corresponding to claim 53, see rejection of claim 12.

Referring to claim 64, corresponding to claim 63, see rejection of claim 13.

Referring to claim 76, corresponding to claim 65, see rejection of claim 12.

Referring to claim 77, corresponding to claim 76, see rejection of claim 13.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. Wilder whose telephone number is 571-272-2826. The examiner can normally be reached on 8 AM - 4PM Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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